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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,149	08/06/2001	Steven C. Tankersley	P4839-001	8984

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EXAMINER

KIKNADZE, IRAKLI

ART UNIT PAPER NUMBER

2882

DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/923,149

Applicant(s)

TANKERSLEY, STEVEN C.

Examiner

Irakli Kiknadze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Badano et al. (US Patent 6,167,292).

With respect to claims 1, 8, 10, 17 and 18, Badano discloses a radiographic imager having a measuring device for determining the distance between two selected points associated with the radiographic imager, comprising: a radiated signal source (48) positioned at one of the point associated with the radiographic imager and operative to project a radiated signal; a detector (32a) positioned at the other point associated with the radiographic imager and operative to detect the radiated signal; and a circuit connected to the radiated signal source and the detector, the circuit operative to determine the travel time of the radiated signal between the points, and thereby determine the distance between the points (column 1; line 14 and column 2; line 47-59).

With respect to claims 2 and 3, Badano discloses that the distance between the points is determined by multiplying the propagation speed of the radiated signal by the travel time of the radiated signal (column 2; line 47-59).

With respect to claims 4, 15, and 19, Badano discloses that the radiated signal is selected from the group including a laser beam, ultrasonic signal, magnetic field, and RIF electromagnetic signal (column 2; lines 33-38).

With respect to claims 5, 6, 9 and 16, Badano discloses a display (74)(Fig.7) connected to a circuit can display the distance between the two selected points (column 11; line 59 – column 12; line 33).

With respect to claims 7 and 11, Badano discloses a power source (unit 44) connected (wire 46) to the radiated signal source (48) via a switch, whereby the radiated signal source is placed in an operative state or an inoperative state responsive to the switch configuration (column 12; line 5-14).

With respect to claims 12 - 14 and 20, Badano discloses a controller (70) operatively associated with the radiated signal source (48) and the detector (32a) for the determining the distance between two points based on the travel time of the radiated signal in moving from the radiated signal source to the detector.

With respect to claims 1-20, Badano discloses the claimed invention, a measuring device can determining the distance between any two selected points associated with the radiographic apparatus to ensure the proper relationship between the radiation source and the imaging subject (column 5; lines 5-37), except for disclosing that the device is employed for measuring distance between an X-ray source /or a collimator and an image receptor. It would have been obvious to one of ordinary skill in the art at the time invention was made to employ Badano's teaching of determining the travel time of the radiated signal between the two selected points, and thereby specifically

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determine the distance between the points to measure distance between an X-ray source /or a collimator and an image receptor because it would allow the radiographic imager easily and accurately set prior to each exposure to increase the quality of the resulting diagnostic image and ensure the proper relationship between the radiation beam energy and the imaging subject.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is (703) 305-6464. The examiner can normally be reached on M-F(8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Irakli Kiknadze
March 20, 2003